PTO/SB/01 (08-03)

Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Attorney Docket Number 102-008-US DECLARATION FOR UTILITY OR First Named Inventor **DESIGN** James S. Shirk PATENT APPLICATION COMPLETE IF KNOWN (37 CFR 1.63) **Application Number** New Application Filing Date Declaration Declaration Submitted OR Submitted after Initial Art Unit With Initial Filing (surcharge Filing (37 CFR 1.16 (e)) **Examiner Name** required) I hereby declare that: Each inventor's residence, mailing address, and citizenship are as stated below next to their name. I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled: Variable Refractive Index Polymer Materials (Title of the Invention) the specification of which is attached hereto OR was filed on (MM/DD/YYYY) as United States Application Number or PCT International Application Number and was amended on (MM/DD/YYYY) (if applicable). I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application. I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed. **Prior Foreign Application** Foreign Filing Date **Priority** Certified Copy Attached? Country (MM/DD/YYYY) Number(s) **Not Claimed**

Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

DECLARATION — Utility or Design Patent Application

Direct all correspondence to:	Customer	r Number:	2	28727		OR		Corresp	oondence address below
Name									
Address		1 7 1							
City				State	e				ZiP
Country		Telephone				Fax			
I hereby declare that all statem and belief are believed to be statements and the like so mad false statements may jeopardize	e true; and furti de are punishab	ther that thole of	hese state or impriso	temen onmer	nts were nt, or bo	made oth, und	with the	the kno	wledge that willful false
NAME OF SOLE OR FIRST IN	VENTOR:		ПАр	etitior	n has be	en filed	for this	s unsign	ned inventor
Given Name (first and middle [if any]) James S.	•				F	ras been filed for this unsigned inventor Family Name or Surname Shirk			
Inventor's Signature fame	. S. D.	n'(Date 2/13/2004
Residence: City	State			Cou	ntry			Citizen	iship
Alexandria	VA			us				US	
Mailing Address									
8316 Ashwood Drive									
City	State			-	ZIP			1	Country
Alexandria	VA				22308				us
NAME OF SECOND INVENTO	R:	* * 1000				etition h	as bee	n filed fo	or this unsigned inventor
Given Name					Fa	mily Na	ame		· · · · · · · · · · · · · · · · · · ·
(first and middle [if any]) Eric					or	Surnan	ne _{Baer}		
Inventor's Signature									Date
Residence: City	State			Cou	ntry			Citizen	ship
Cleveland Heights	ОН			us			us .		
Mailing Address									
2 Mornington Lane									
City	State				ZIP			Countr	γ
Cleveland Heights	он '				44106			us	
Additional inventors or a legal rep	oresentative are beir	ng named on t	the 1 s	upplem	nental sher	et(s) PTO	/SB/02A	or 02LR a	attached hereto.

PTO/SB/01 (06-03)

Approved for use through 07/31/2003. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

DECLARATION — Utility or Design Patent Application

Direct all correspondence to:	Custome	er Number:	:	28727		OR		Corres	pondence address below
Name									
Address									
City				State			 .		Tan
				State	e 				ZIP
Country		Telephon	е			Fax	_		
I hereby declare that all statem and belief are believed to be statements and the like so mad false statements may jeopardiz	e true; and furt de are punishat	ther that t ble by fine	these state or imprise	tement onmen	its were	e made oth, und	e with der 18 t	the kno	owledge that willful false
NAME OF SOLE OR FIRST IN	VENTOR:		Пар	etition	has be	en filed	for thi	s unsigi	ned inventor
Given Name (first and middle [if any]) James S.					Family Name or Surname Shirk				
Inventor's Signature									Date
Residence: City	State			Cour	ntry			Citize	nship
Alexandria	VA		!	US				us	
Mailing Address									
8316 Ashwood Drive									
City	State				ZIP				Country
Alexandria	VA				22308	i			us
NAME OF SECOND INVENTO	R:							n filed f	or this unsigned inventor
Given Name (first and middle [if any])					Fa	amily Na	ame		
Enc						Surnar	ne Baer		
Inventor's Signature	De C								Date Feb. 23, 2004
Residence: City	State			Cour	ntry			Citizer	nship
Cleveland Heights	ОН			us				us	
Mailing Address									
2 Mornington Lane									
City	State				ZIP			Count	ry
Cleveland Heights	он				44106			US	
Additional inventors or a legal rep	resentative are beir	ng named on	the 1 s	upplemo	ental she	et(s) PTO	/SB/02A	or 02LR a	attached hereto.

PTO/SB/02A (08-03)

Approved for use through 08/31/2003. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

DECLARATION

ADDITIONAL INVENTOR(S)

Z' - , :-

DECLARATION	Supplemental Sheet Page 3 of 3						
Name of Additional Joint Inventor, if any:		A petitio	n has been filed for this	unsigned in	ventor		
Given Name (first and middle (if any)	Family Name of						
P. Anne		Hiltner	Juliane				
Inventor's Signature D. Clume / filter		123/04					
Cleveland Residence: City	OH State		S ountry	US Citizenship			
13615 Shaker Boulevard, #4B Mailing Address							
Mailing Address							
Cleveland	ОН		44120	US			
City	State	<u> </u>	Zip	Country			
Name of Additional Joint Inventor, if any:	Name of Additional Joint Inventor, if any: A petition has been filed for this unsigned inventor						
Given Name (first and middle (if any)		Family Name or Surname					
Inventor's Signature		Date					
Residence: City	State	1	Country Citizenship				
Mailing Address							
Mailing Address							
City	State		Zip Country				
Name of Additional Joint Inventor, if any:		A petition	has been filed for this		ventor		
Given Name (first and middle (if any)	Family Name or Surname						
				-			
Inventor's Signature		Date			·		
Residence: City State		Country Citizenship			Citizenship		
Mailing Address							
Mailing Address							
City	State		Zip Country				

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/81 (09-03)

Approved for use through 11/30/2005. OMB 0651-0035

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

POWER OF ATTORNEY and CORRESPONDENCE ADDRESS INDICATION FORM

ed to respond to a collection of info	ormation unless it displays a valid OMB con	trol number.
Application Number	New Application	
Filing Date		
First Named Inventor	James S. Shirk	
Title		
Art Unit		
Examiner Name		
Attorney Docket Number	102-008-US	

I hereby appoint:		
Thereby appoint.		
Practitioners associated with the Customer Number:	· 28727	
OR		
Practitioner(s) named below:		•
Name	F	Registration Number
	· [•
as my/our attorney(s) or agent(s) to prosecute the application Trademark Office connected therewith.	dentified above, and to transact a	all business in the United States Patent and
Diagramma or shares the correspondence address for the	to the second se	
Please recognize or change the correspondence address for the	ne above-identified application to	:
The address associated with the above-mentioned C	ustomer Number:	
OR I		
The address associated with Customer Number:		
OR		
Firm or Individual Name		
Address		
Address	·	
City	State	Zip
Country		
Telephone	Fax	
lam the:	Fax	
	Fax	
I am the: Applicant/Inventor.		
lam the:	3.71.	
Applicant/Inventor. Assignee of record of the entire interest. See 37 CFR Statement under 37 CFR 3.73(b) is enclosed. (Form 1)	3.71.	rd
Applicant/Inventor. Assignee of record of the entire interest. See 37 CFR Statement under 37 CFR 3.73(b) is enclosed. (Form 1)	3.71. PTO/SB/96)	rd
Applicant/Inventor. Assignee of record of the entire interest. See 37 CFR Statement under 37 CFR 3.73(b) is enclosed. (Form of Name James S. Shirk Signature James S. Shirk	3.71. PTO/SB/96)	rd
Applicant/Inventor. Assignee of record of the entire interest. See 37 CFR Statement under 37 CFR 3.73(b) is enclosed. (Form Inventor) SIGNATURE of Inventor.	3.71. PTO/SB/96) Applicant or Assignee of Reco	rd elephone <i>202 – 761 - 48 71</i>
Applicant/Inventor. Assignee of record of the entire interest. See 37 CFR Statement under 37 CFR 3.73(b) is enclosed. (Form of Name James S. Shirk Signature James S. Shirk	3.71. PTO/SB/96) Applicant or Assignee of Recol	elephone 202 – 761 – 48 71

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/81 (09-03)

Approved for use through 11/30/2005. OMB 0651-0035
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

POWER OF ATTORNEY and CORRESPONDENCE ADDRESS INDICATION FORM

	ormation unless it displays a valid OME	s control number.
Application Number	New Application	
Filing Date		
First Named Inventor	James S. Shirk	
Title		
Art Unit		
Examiner Name		
Attorney Docket Number	102-008-US	

I harabu ar						
I hereby ap	ppoint:	Г]
✓ Prac	ctitioners associated v	with the Customer Number:		28727		
OR		Ł				
Prac	ctitioner(s) named bel	low:				
		Name			Registration	Number
						Number
						
 		,				
 						
as mylour:	ottornovic) or agentic	to areasoute the application i	dentified above	and to trans		in the United States Patent and
Trademark	Coffice connected the	s) to prosecute the application is erewith.	dentified above	, and to train	sact all business	in the United States Patent and
-						
Please rec	ognize or change the	correspondence address for the	ne above-identif	fied application	on to:	
ll t	he address associate	ed with the above-mentioned Co	ustomer Numbe	ar.		
			201011101 112112			
OR		Γ				
\Box .						
L I	The address associate	ed with Customer Number:				
OR						
	Firm or					
Addı	Individual Name					
Addı			· · · · · · · · · · · · · · · · · · ·	T =		
City				State		Zip
Cou						
	phone			Fax		
l am the:						
✓ A _l	pplicant/Inventor.					
☐ As	ssianee of record of t	he entire interest. See 37 CFR	3.71.			
		FR 3.73(b) is enclosed. (Form F		_		
		SIGNATURE of A	Applicant or As	ssignee of F	Record	
Name	Eric Baer	,				
Signature		lan				
Date	Feb 21	2004			Telephone	
NOTE: Signa	atures of all the inventors at than one signature is re	s or assignees of record of the entire	e interest or their	representative		submit multiple
Torris ii more						
[7]	al of 3f	equiled, see below .				

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/81 (09-03)

Approved for use through 11/30/2005. OMB 0651-0035
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCIA Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

POWER OF ATTORNEY and CORRESPONDENCE ADDRESS INDICATION FORM

red to respond to a collection of info	imation unless it displays a valid OMB control number.
Application Number	New Application
Filing Date	
First Named Inventor	James S. Shirk
Title	
Art Unit	
Examiner Name	
Attorney Docket Number	102-008-US

I hereby a	annoint:					
		with the Customer Number:		28727		
OR						
Pra	actitioner(s) named be	low:				
		Name			Registration I	Number
-					•	
 -						
l ⊢						
<u> </u>						
L						
as my/our Trademar	· attorney(s) or agent(s k Office connected the	 to prosecute the application is erewith. 	identified above,	, and to trans	sact all business i	in the United States Patent and
Please re	cognize or change the	e correspondence address for t	he above-identif	ied applicati	on to:	
	The address associate	ed with the above-mentioned C	ustomer Numbe	er:		
OR						
	The address associate	ed with Customer Number:			İ	
OR		L	·····			
<u> </u>	Firm or					
	Individual Name				_	
	iress					
	dress			 		
City				State		Zip
	intry					
I am the:	ephone			Fax		
7	V					
	Applicant/Inventor.					
^	Assignee of record of t Statement under 37 CF	he entire interest. See 37 CFR FR 3.73(b) is enclosed. (Form I	3.71. <i>PTO/SB/96)</i>			
· · · · · · · · · · · · · · · · · · ·		SIGNATURE of	Applicant or As	signee of R	Record	
Name	P. Anne Hiltner					
Signature	N. Clay	1/ fellows				
Date	02/21/09	1			Telephone	
NOTE: Sign	atures of all the inventors e than one signature is re	s or assignees of record of the entire	re interest or their :	representative	(s) are required. Su	bmit multiple
TOTTIS II TITOT	e than one signature is re	squired, see below .				

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.